



IEC 61850 Certificate Level A¹

International Usersgroup

No. 74105171-OPE/INC 14-1337

Issued to:
COL Giovanni Paolo SpA
Via Fratelli Cerano 20
10024 Moncalieri (Turin)
Italy

For the server product:
BU 9000
Bay Unit
Software version: 2.1
Hardware version: 9M030303CBAVIT



Issued by:

The server product has not shown to be non-conforming to:

IEC 61850 First Edition Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10, the UCA International Users Group Device Test Procedures version 2.3 with TPCL² version 1.7, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in COL BU9000 version 1.0", "Model Implementation Conformance Statement for the IEC 61850 interface in COL BU9000 version 1.0" and "TISSUES Implementation Conformance Statement for the IEC 61850 interface in COL BU9000 version 1.0" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in COL BU9000 version 1.0".

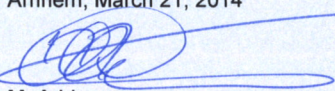
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

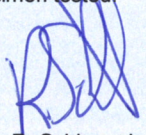
1	Basic Exchange (16/24)	9a	GOOSE Publish (10/13)
2	Data Sets (3/6)	9b	GOOSE Subscribe (11/11)
5	Unbuffered Reporting (15/19)	12a	Direct Control (3/12)
6	Buffered Reporting (18/21)	12c	Enhanced Direct Control (4/13)
		12d	Enhanced SBO Control (9/19)
		13	Time Synchronization (3/5)
		14	File Transfer (4/7)

This certificate includes a summary of the test results as carried out at COL Giovanni Paolo SpA in Italy with UniCA 61850 Client Simulator 4.27.04 with test suite 3.27.00 and UniCA 61850 Analyzer 5.27.04. This document has been issued for information purposes only, and the original paper copy of the DNV KEMA report No. 74105171-OPE/INC 14-1338 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV KEMA by COL Giovanni Paolo SpA. The manufacturer's production process has not been assessed. This attestation does not imply that DNV KEMA has approved any product other than the specimen tested.

Arnhem, March 21, 2014


M. Adriaensen
Head of Department Operational Excellence


R. Schimmel
Certification Manager

¹ Level A - Independent test lab with certified ISO 9001 Quality System

² TPCL - Test procedures change list



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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.7

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv8, SrvN1f
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12, RpN1, RpN2, RpN3, RpN4	Rp5, Rp8, Rp9, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14, BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10, Br11, BrN6
9a: GOOSE Publish	Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a	Gop1, Gop6, Gop10b, GopN1
9b: GOOSE Subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b, Gos4
12a: Direct Control	CtIN3, CtIN8, DOns1	
12c: Enhanced Direct Control	CtIN3, CtIN8, DOes2, DOes5	
12d: Enhanced SBO Control	CtI3, CtIN1, CtIN2, CtIN3, CtIN4, CtIN9, SBOes1, SBOes2, SBOes3	
13: Time Sync	Tm1, Tm2, TmN1	
14: File Transfer	Ft1, Ft2ab, Ft4, FtN1ab	